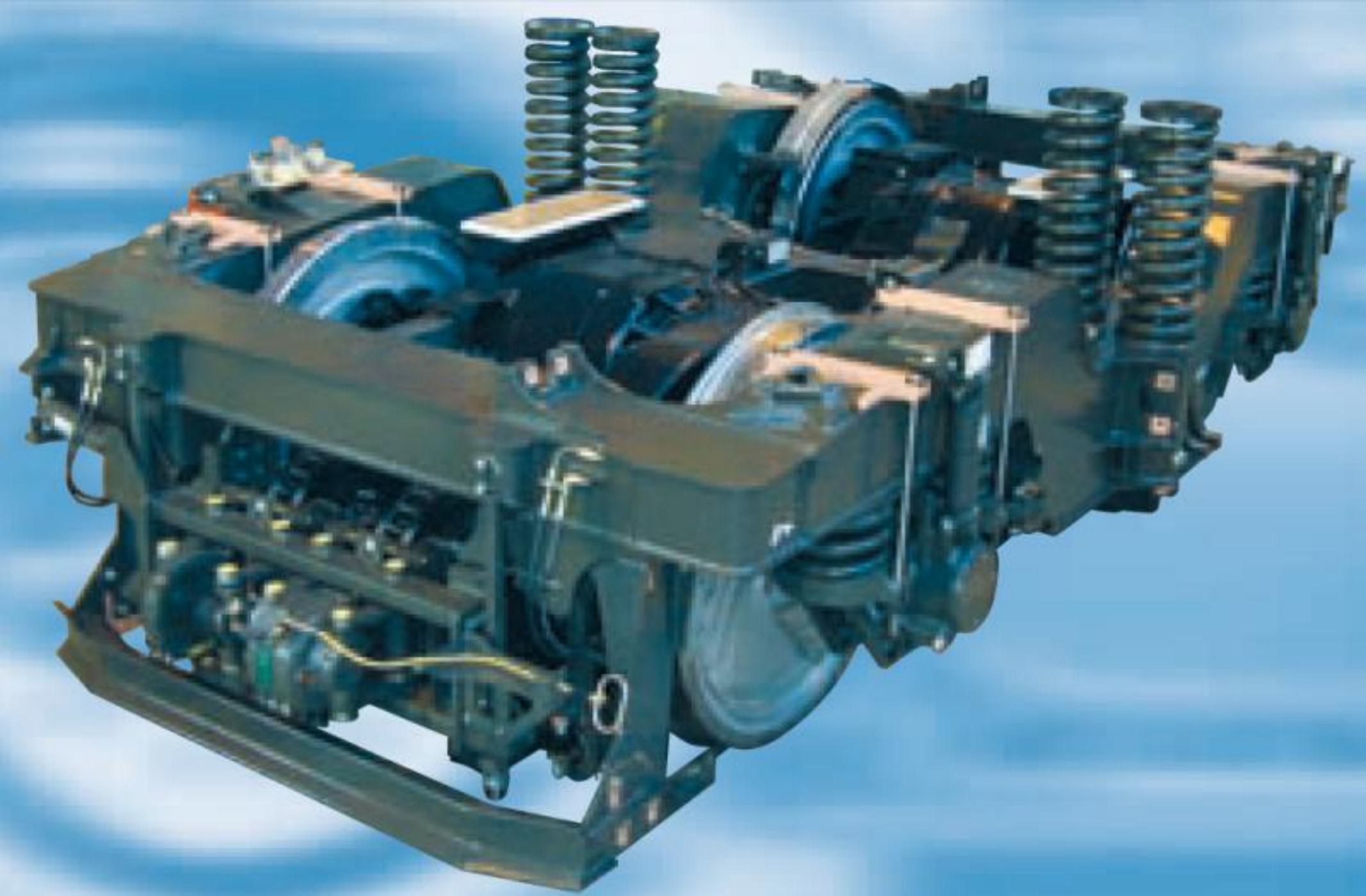

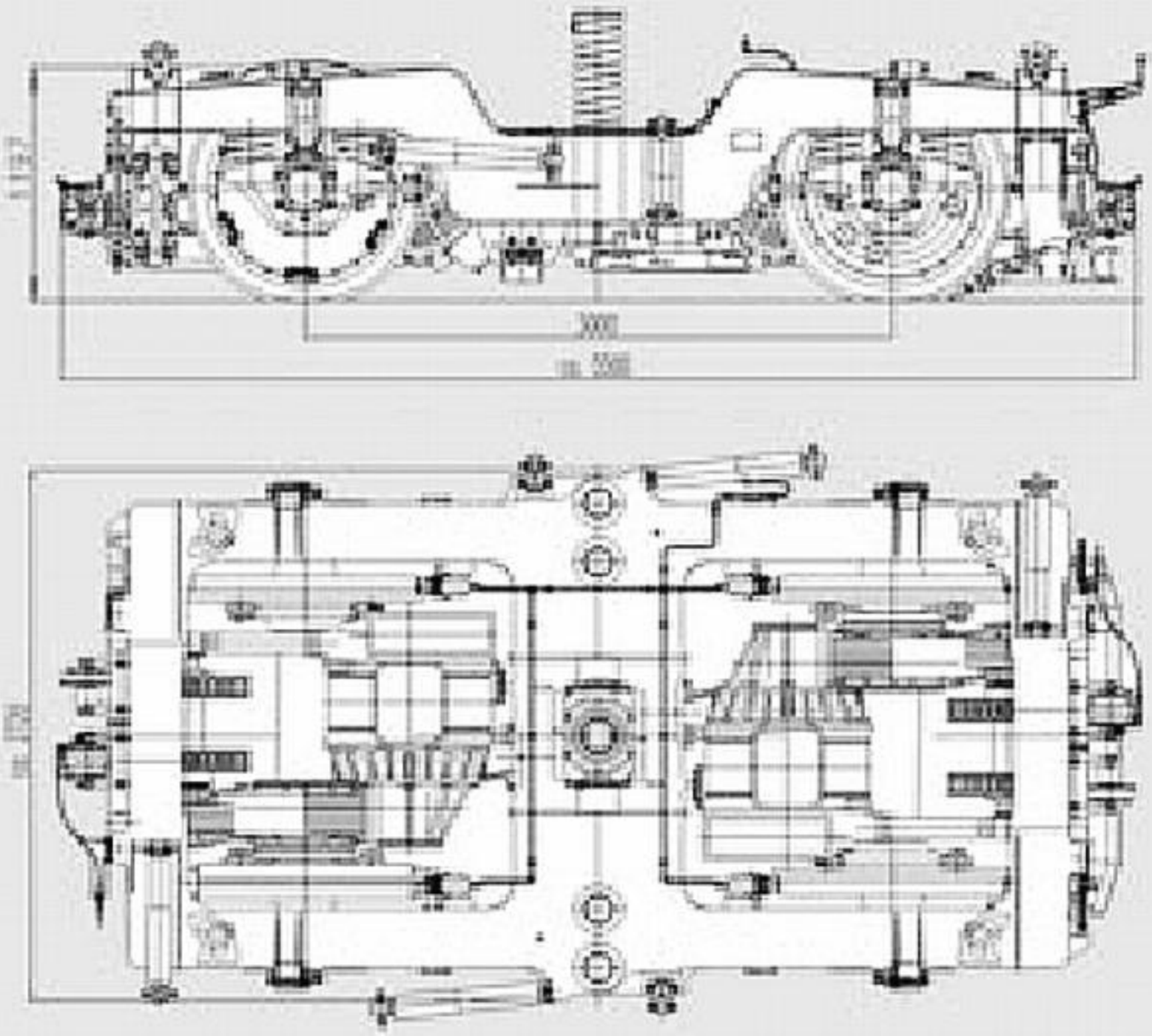

The secondary springs were arranged at right angles to relieve the bogie frame from torsional strain in the side frame and from bending load in the transom section. This allows further reduction of frame mass.

The tractive force is transferred wear-free from the bogie to the locomotive box via a sunken bogie pin bearing with lemniscate control rod. The power transmission point lies only 420 mm above the upper surface of the rail.

The bogie is fitted with a wheel flange lubrication system and a sand distribution system. The bogie can be equipped with a track guard or sweeper as well as a derailment guard.

All wheels can optionally be fitted with sound absorbers. The SF 1 bogie is also installed in the locomotive, that set the new world record for high speed locomotives in September 2006 between Nürnberg and Ingolstadt.

Technical Data	
Bogie	SF 1
Running speed	230 km/h
Axle load	21,5 t
Continuous power per wheelset	1600 kW
Max. starting tractive effort per wheelset	75 kN
Wheelbase	3000 mm
Track gauge	1435 mm
Wheel diameter new / worn	1150 / 1070 mm
Smallest radius of curvature	120 m
Weight	app. 18 t
Secondary transmission of longitudinal forces	pivot
Traction unit	HAB (high-performance drive with brake shaft)
Mechanical brake	Disk brakes on separate brake shaft